RJS
Electronics

■ Specifications

| Circuit | :SPST |
|---|---|
| Current Rating | :50mA @ 12VDC |
| Contact Resistance | :100mOhm Max.(initial) |
| Insulation Resistance | :100MOhm Min. |
| Operating Force | :300gf ± 100gf |
| Total Travel | :0.3mm±0.1mm |
| Mechanical Life | :5,000,000 cycles Min. |
| Operating Temperature | :-25 deg.~+60 deg. |
| Solder Specifications | :260 deg. for 3 seconds |

**Materials**

| Cover | :Polycarbonate (PC) |
|---|---|
| Cap | :Polycarbonate (PC) |
| Housing | :Polyamide (PA) |
| Base | :Polyamide (PA) |
| Lamp Term. | :Phosphor bronze (PBS) with gold plating |
| Act. Dome | :SUS with silver plating |
| End Term. | :Brass with gold plating |
| LED | :Surface Mount Chip LED |

## SPL12
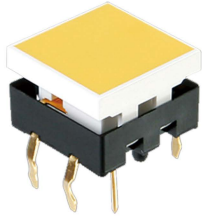
### Key Features

LED illuminated push button switch
Momentary function
Single/bi-colour LED illumination
12mm square cap
Compatible with Smart Caps.
Tactile click

## PCB layout & Circuit Diagram

### SPL12 Dimension



### Contact Configuration



PCB Layout
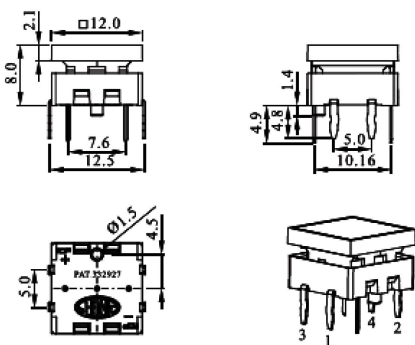
(SPST)
Contact Configuration
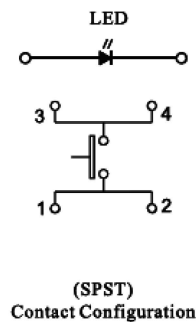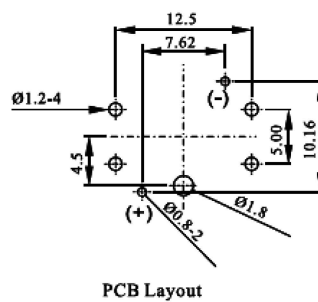
## How to Order

S P L 1 2 ☐ – ☐ – ☐☐☐ – ☐☐

| Function Code | | Diffuser Colors | | LED Colors | | Cover style / Color | |
|---|---|---|---|---|---|---|---|
| P | Illuminated Switch | 1 | Red | 01 | Red | 00 | Without Cover |
| | | 2 | Yellow | S2S | Super Yellow | FC | Flat/clear |
| | | 3 | Green | 03 | Green | FH | Flat/clear h=4.9mm |
| | | 4 | White | P3S | Pure Green | RC | Round h=4.9mm/clear |
| | | | | 4S | White | RH | Round h=6.9mm/clear |
| | | | | 7S | Blue | SC | Square h=4.9mm/clear |
| | | | | | | SH | Square h=6.9mm/clear |
| | | | | | | UT | UP Triangle/clear |
| | | | | | | DT | Down Triangle/clear |
| | | | | | | RT | Right Triangle/clear |
| | | | | | | LT | Left Triangle/clear |
| | | | | | | C4 | Flat cover/white |
| | | | | | | C5 | Flat cover/Foggy |
| | | | | | | B4 | Raised cover/white |
| | | | | | | B5 | Raised cover/clear |

EXAMPLE : SPL12P-2-S2S-FC
Illuminated tact switch PCB type - Yellow cap - Super Yellow led-Flat cover

## SPL12 Cover Style



Round Cover(RC)
h=4.9mm

Round Cover(RH)
h=6.9mm

Flat Cover(FC)

Flat cover(white C4 or clear C5)

UP Triangle(UT)

Down Triangle(DT)

Square Cover(SC)
h=4.9mm

Square Cover(SH)
h=6.9mm

Right Triangle(RT)

Left Triangle(LT)

Raised cover(white B4)

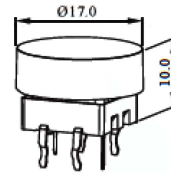Flat Cover(FH)
h=4.9mm

**RJS Electronics**
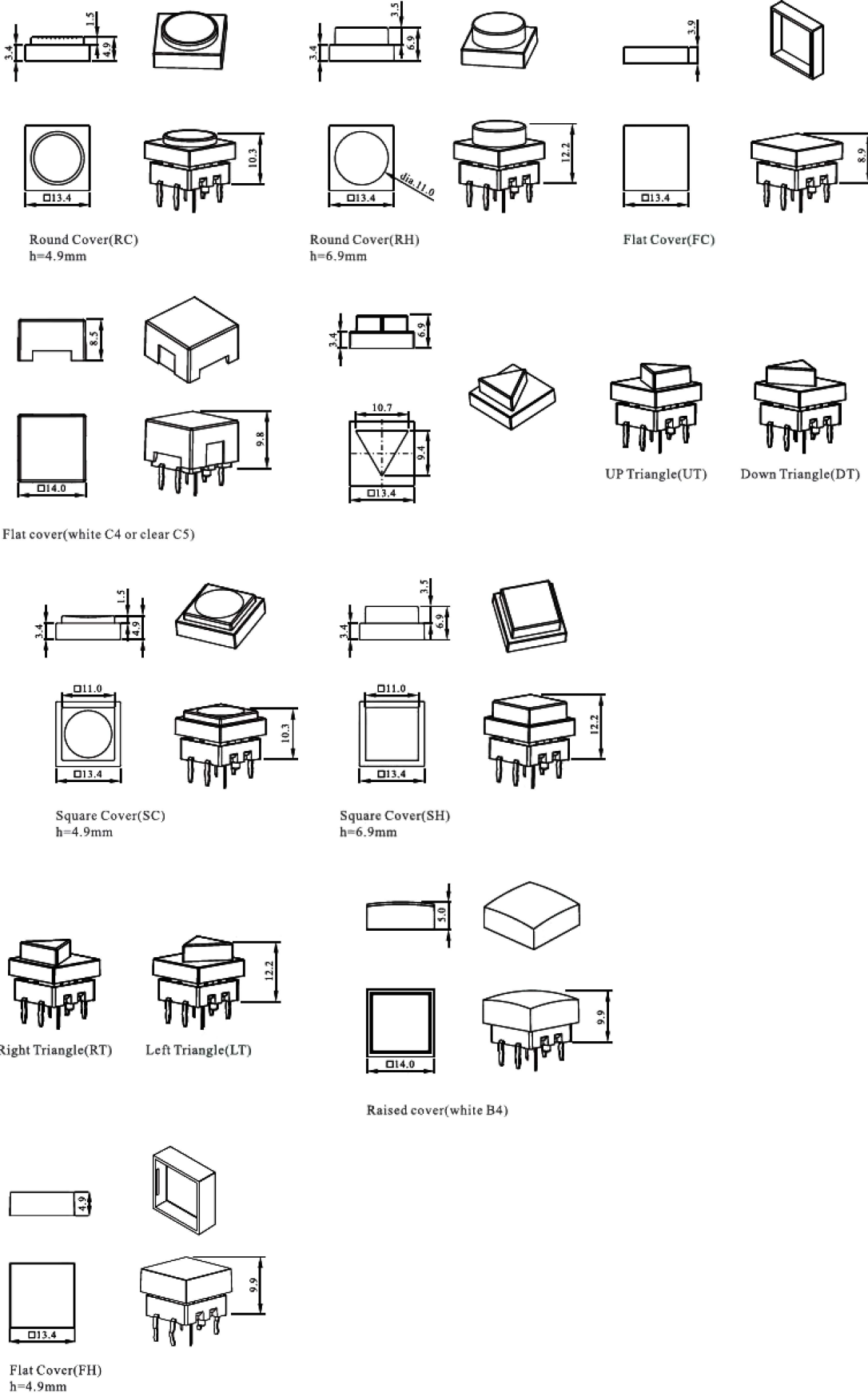
## ■ SPL15



### Key Features

ø 15mm cap

Momentary with a tactile click

Single/Bi-colour LED illumination

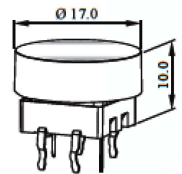Compatible with Smart Caps.

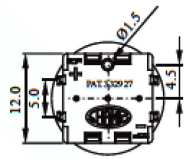## ■ PCB layout & Circuit Diagram
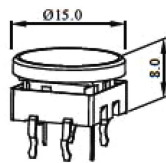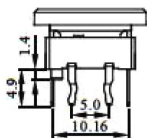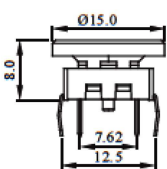


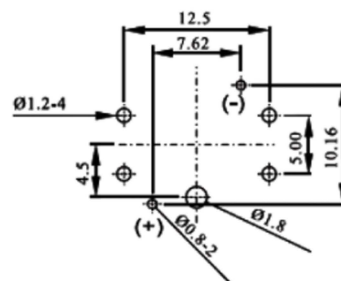Standard switch unit

Switch with VAT cover

Switch with CVT cover

Suggested Panel Cut

Circuit
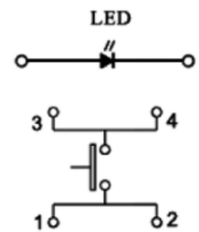


15.0 Ø

PCB Layout

(SPST)
Contact Configuration

## ■ How to Order

SPL15 — ☐ — ☐☐☐ — ☐☐☐
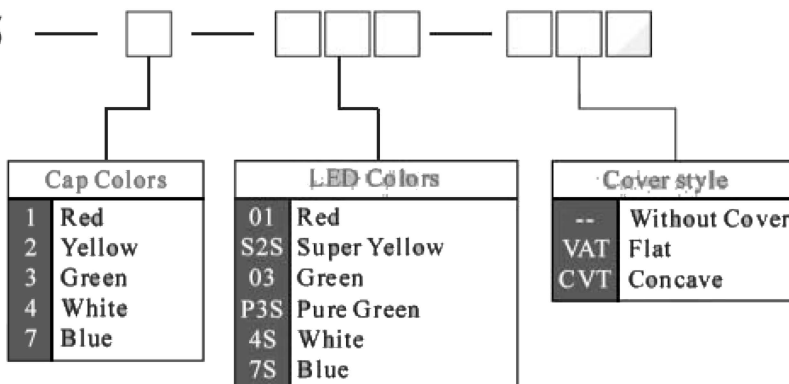
| Cap Colors | |
|---|---|
| 1 | Red |
| 2 | Yellow |
| 3 | Green |
| 4 | White |
| 7 | Blue |

| LED Colors | |
|---|---|
| 01 | Red |
| S2S | Super Yellow |
| 03 | Green |
| P3S | Pure Green |
| 4S | White |
| 7S | Blue |

| Cover style | |
|---|---|
| -- | Without Cover |
| VAT | Flat |
| CVT | Concave |

# SPL Series | Illuminated Tact Switch Series
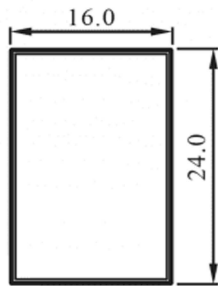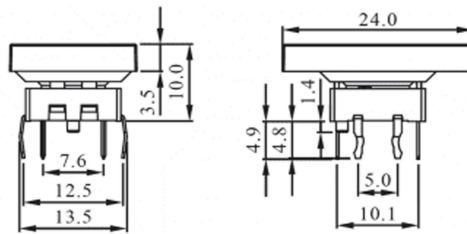
## ■ SPL16



### Key Features

ø 16mm cap

Momentary with a tactile click

Rectangular cap

Single/Bi-colour LED illumination

Compatible with Smart Caps.

## ■ PCB layout & Circuit Diagram



**Top View**

16.0

24.0

**Side View**

24.0

3.5 / 10.0

1.4

4.9 / 4.8

7.6

12.5

13.5

5.0

10.1

**Suggested Panel Cut-out**

Min25

Min17

Min17

Min25

R

without cover

Min27

Min19

Min19

Min27

R

with cover

### Circuit



12.5

7.62

Ø1.2-4

(-)

4.5

5.00

10.16

(+)

Ø0.8-2

Ø1.8

**PCB Layout**

LED

3          4

1          2

**(SPST)**
**Contact Configuration**

### Dimensions
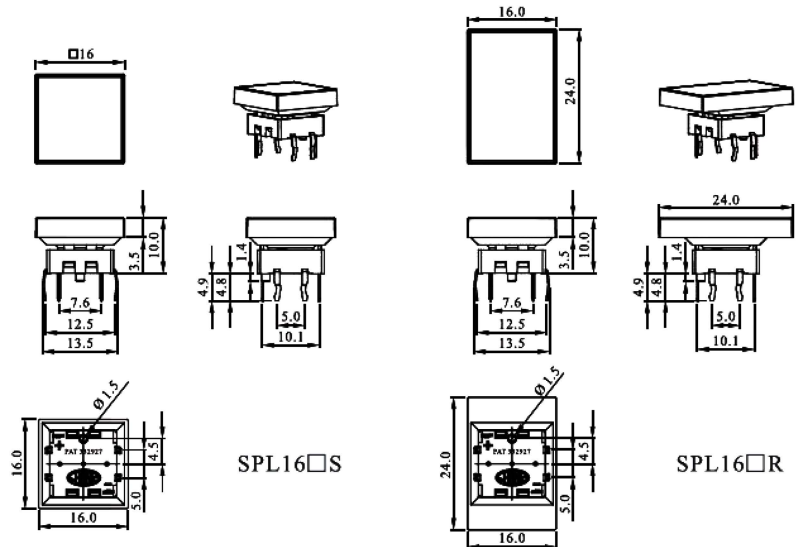


□16

3.5 / 10.0

4.9 / 4.8 / 1.4

7.6

12.5

13.5

5.0

10.1

Ø1.5

16.0

4.5

5.0

16.0

**SPL16□S**

16.0

24.0

3.5 / 10.0

4.9 / 4.8 / 1.4

7.6

12.5

13.5

24.0

5.0

10.1

Ø1.5

24.0

16.0

4.5

5.0

16.0

**SPL16□R**

**RJS Electronics**

## ■ SPL16



### Key Features

ø 16mm cap

Momentary with a tactile click

Rectangular cap

Single/Bi-colour LED illumination

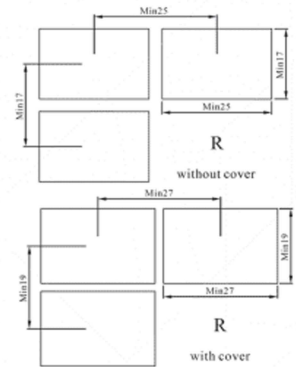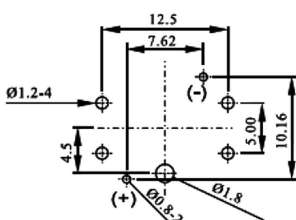Compatible with Smart Caps.

## ■ PCB layout & Circuit Diagram

Suggested Panel Cut
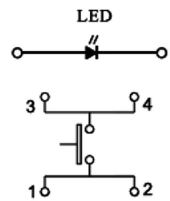


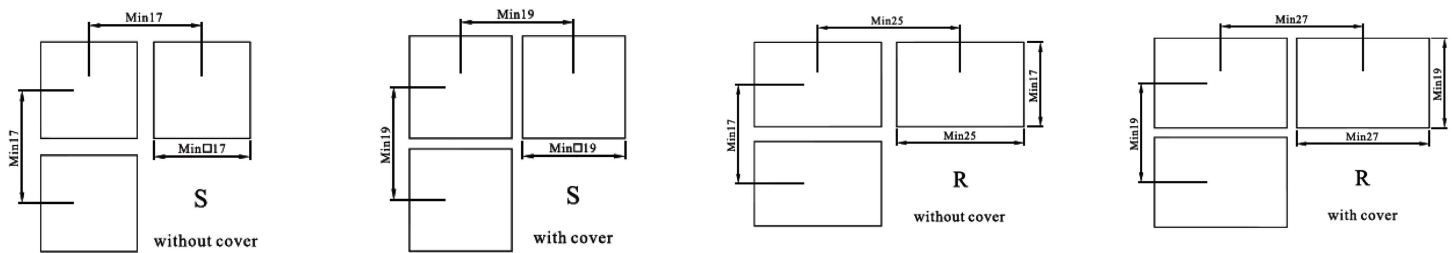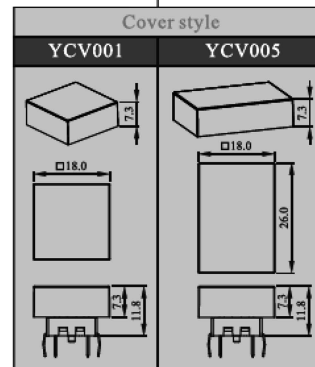| Min17 | | Min19 | | Min25 | | Min27 | |
|---|---|---|---|---|---|---|---|
| Min17 | Min□17 | Min19 | Min□19 | Min17 | Min25 | Min19 | Min27 |
| S | | S | | R | | R | |
| without cover | | with cover | | without cover | | with cover | |

## ■ How to Order

S P L 1 6 □ – □ – □□□ – Y C V □□□

| Apparent shaped | | Diffuser Colors | | LED Colors | | Cover style | |
|---|---|---|---|---|---|---|---|
| S | Square | 1 | Red | 01 | Red | YCV001 | YCV005 |
| R | Rectangular | 2 | Yellow | S2S | Super Yellow | | |
| | | 3 | Green | 03 | Green | | |
| | | 4 | White | P3S | Pure Green | | |
| | | 7 | Blue | 4S | White | | |
| | | | | 7S | Blue | | |

**■ SPL16**



**■ How to Order**

S P L G ☐ ☐

| LED Colors | |
|---|---|
| 1 | Red |
| 2 | Super Yellow |
| 4 | White |
| 5 | Pure Green |
| 7 | Blue |

SMART CAP